Arizona Public Service Company City of Phoenix Components, Incorporated Cooper Industries, LLC Dolphin, Inc. Holsum Bakery, Inc. Honeywell International Inc. Laundry & Cleaners Supply, Inc. Maricopa Land and Cattle Company Meritor, Inc. Milum Textile Services Co. Penn Racquet Sports Prudential Overall Supply Schuff Steel Univar USA, Inc.

June 30, 2011

Mr. Kevin Snyder Arizona Department of Environmental Quality Project Manager, Remedial Projects Unit, Waste Programs Division 1110 West Washington Street, MC4415B-1 Phoenix, Arizona 85007

Re: Proposed Remedial Objectives Report for the West Van Buren WQARF Registry Site

Dear Mr. Snyder:

The undersigned parties appreciate the opportunity to comment on ADEQ's Draft Remedial Objectives Report for the West Van Buren WQARF Registry Site, dated May 16, 2011 (Draft Report). As a general matter, we support the Remedial Objectives as drafted. With some minor revisions as discussed within these comments, the Draft Report should serve as a helpful vehicle in moving the West Van Buren site forward in the process.

Although the groundwater use Remedial Objectives as a whole are sound, we suggest modifying the reasonably foreseeable listed uses in three respects. We propose two changes to the proposed Remedial Objectives for groundwater uses, and we propose to re-format the Remedial Objectives for land uses. First, RID's proposed future sale of the area water supply for drinking water use by third parties outside the area is not a reasonably foreseeable use that should be recognized as a Remedial Objective for West Van Buren. We do agree that accommodating future drinking water use in general is an appropriate Remedial Objective. Second, the listed "uses" and associated Remedial Objectives discussed within Section 4.1 are actually risks, not beneficial end uses. All risk pathways must, of course, be identified in the Remedial Investigation and Feasibility Study, and addressed by the selected remedy for the site. But only beneficial uses of water and land should be stated as Remedial Objectives in the WQARF rules. Finally, the proposed land use Remedial Objectives improperly confuse land uses with risks, and include some, but not all, of the risks that should be addressed in the RI/FS.

A. With Only Two Exceptions, ADEQ's Proposed Groundwater Remedial Objectives Properly Reflect Reasonably Foreseeable Uses within the WVB Area.

Overall we agree with the proposed groundwater Remedial Objectives as drafted. The Remedial Objectives associated with the three groundwater uses - municipal, agricultural, and private - recognize and account for the changing uses inherent in Arizona's groundwater environment. We appreciate the agency's recognition that land uses and their associated groundwater uses are transitioning from traditional irrigated lands for agricultural purposes to more urbanized, municipal uses. Although expected to continue within the next 100 years, the rate and timing of land and groundwater changes are unknown. As reflected in the agency's Draft Report and in the City of Phoenix water planning information shared with ADEQ, water providers anticipate this conversion and have attempted to plan for these changes, but the exact timing is of course uncertain. The uncertainty inherent in this prediction and planning effort was recognized even when the remedy selection rules were being developed. In the remedy selection rulemaking package, ADEQ stated "[i]n regard to estimating future population and water uses, the Department agrees that it is difficult to predict well into the future. That is one of the reasons the Department specifies water management plans as a tool in the information collection and Remedial Objective process."1

Although only a few years ago most of us would have predicted continued growth and associated changes in water use, today we have all observed and experienced the effects of the unprecedented economic environment and associated dramatic slow down in development. This historic economic environment adds to the already complex water planning and prediction effort.

It is reasonably foreseeable that over the next 100 years, land uses within the WVB area will continue to convert from agricultural to more urbanized uses and an attendant change in groundwater use from irrigation to municipal. It is critical for water providers in the greater Phoenix area to plan for this anticipated transition, and indeed they have. Anticipating an increased need for groundwater supplies, Phoenix has retained its currently inactive groundwater wells with plans to reactivate them along with minor modifications when groundwater needs increase. Phoenix's planning efforts also include maintaining its special pump rights with SRP and further direct connections to SRP wells.² These are just some of the examples of water providers anticipating and planning for the changing future needs of the lands they serve. On the other hand, what is not reasonably foreseeable, and what is discussed in more detail below, is exportation of the area's groundwater to other lands outside of the WVB area's boundaries.

B. The Draft Report's Inclusion of Future RID Drinking Water Supply Use is Not Reasonably Foreseeable and Should Be Removed from the Draft Report.

¹ 8 A.A.R. 1491, 1522 (March 29, 2002).

² Terranext, Land and Water Use Report West Van Buren Area WQARF Registry Site, 3-2 (December, 2007).

Only current and reasonably foreseeable uses of land and the current and reasonably foreseeable beneficial uses of waters of the state, supported by information provided during the public meeting and other information received by ADEQ, are to be listed within the Proposed Remedial Objectives Report.³ Although ADEQ selects Remedial Objectives based upon public input, the agency must evaluate and refine the information to determine what uses are reasonably foreseeable.

As part of the Remedial Objectives development process, the agency solicits a variety of public input, including input from water providers and from members of the public. Inherent in the process is receipt of conflicting information and expressions of competing interests and uses, a phenomenon recognized during development of the remedy selection rules.⁴ The agency evaluates all of this input to determine reasonably foreseeable uses. Those uses are then listed as the Remedial Objectives for the Site.⁵

Reasonably foreseeable uses for water are those likely to occur within 100 years (unless a longer time period is shown to be reasonable based on site-specific circumstances).⁶ As indicated in the regulatory package associated with the remedy selection rule, reasonably foreseeable end uses are those that are *reasonably probable* to occur in the future, "not one simply within the realm of possibility."⁷

Within the Municipal Groundwater Use discussion of Section 3.1, the Draft Report lists, as a reasonably foreseeable use, RID's future drinking water supply for residential and commercial development within the RID water district. This description is somewhat misleading. RID does not propose to use this water for drinking water purposes directly. Rather, RID proposes to export this water from the West Van Buren Site for drinking water use by third parties. Major hurdles standing in the way of this use prevent export of groundwater by RID from meeting the reasonable foreseeability test.

1. RID's Groundwater Pumping Rights Are In Dispute.

ADEQ must consider whether RID's proposed sale is legally permitted. RID's right to continue its groundwater pumping within the Salt River Reservoir District and to transport that water to another area is a matter of dispute between RID and SRP, the other contractual party to RID's water right. RID's contractual right to pump water ends in or about 2026. After that time, RID will not be legally permitted to transport groundwater out of the District to RID's service area or to others in the West Valley. In its December 4, 2009 comments to RID's ERA Proposal, SRP explained the uncertainty associated with RID's groundwater pumping rights and the legal restrictions on transporting pumped water out of the District.

³ A.A.C. § R18-16-406(I)(4).

⁴ See 8 A.A.R. at 1521-22.

⁵ See 8 A.A.R. at 1503, 1519, 1521, 1522.

⁶ A.A.C. § R18-16-406(D).

⁷ 8 A.A.R. at 1519, 1521.

⁸ W.R. Powell, SRP Manager, Risk Management and Environmental Services, *Letter to Julie Riemenschneider*, at 2 (December 4, 2009).

2. RID's Brokerage of this Water Is Barred By State Water Law and Policy.

As discussed within these comments, RID's brokerage of this water for use by the West Valley Cities is not reasonably foreseeable due to various practical reasons, but more importantly, for foundational water law and policy reasons. The Arizona Groundwater Management Act (GMA) grandfathered existing agricultural uses of groundwater. But one of the inherent premises of the Act is that upon urbanization of agricultural lands, groundwater that had been previously used for agricultural purposes would be available to municipal providers to serve those urbanized lands. RID's proposal is to export this groundwater away from those lands. The municipal water providers that will serve these lands in the future have a right to expect to access that groundwater, and have a right to object to its loss.

RID's proposed brokerage of water would be inconsistent with Arizona Department of Water Resources (ADWR) policy regarding incentives for use of remediated water. In 1997, the Arizona Legislature passed legislation to provide incentives to encourage the beneficial use of groundwater withdrawn as part of an approved remediation project. ADWR subsequently published a policy statement explaining the factors it would use to determine whether a remediation project is entitled to these incentives. In RID's proposal is inconsistent with several of these factors. In particular, ADWR discourages the creation of new permanent end uses for remediated groundwater that would not have existed absent the statutory incentive. RID seeks to create a new long-term end use by constructing a new potable water treatment and transmission system. In addition, ADWR encourages reinjection or recharge within the same aquifer or basin from which remediated water is withdrawn, or the replacement of existing groundwater uses in the basin with remediated groundwater. 12

After meeting with RID to hear first-hand about RID's proposed future groundwater uses, the ADWR Director sent RID a letter expressing his serious concerns and detailing the numerous statutory restrictions and water policy principles prevent RID from exporting pumped groundwater outside the West Van Buren area for drinking water purposes.

As stated in ADWR's letter, RID's proposed use runs afoul of at least three primary water law policies. First, the plan conflicts with the foundational assumptions of the GMA. The GMA was based upon the basic principle of reducing dependency on groundwater pumping in Active Management Areas. Although some longstanding

⁹ See, e.g., A.R.S. § 45-469 (prohibition on converting irrigation grandfathered rights to Type 1 non-irrigation rights if land is within the exterior boundaries of the service area of a city, town, or private water company).

¹⁰ ADWR, Substantive Policy Statement: Remediated Groundwater Incentive for Conservation Requirement Accounting for the Second Management Plan (June 14, 1999).

¹¹ *Id.*

¹² *Id*.

irrigation providers may withdraw and transport groundwater from outside their service areas for use within their service areas, ¹³ the GMA envisioned that future deliveries of groundwater for irrigation purposes would decline or be replaced by non-groundwater sources. As traditionally-agricultural lands urbanized, municipal providers who are subject to Assured Water Supply requirements would then provide potable water supplies and groundwater pumping would diminish. RID's proposed future use directly conflicts with these foundational assumptions of the GMA.

Second, uncertainties regarding the duration of RID's contractual groundwater pumping rights prevent use of this water for Assured Water Supply purposes. As previously reflected in SRP's comments to RID's Proposed ERA, there is a dispute between RID and SRP as to the duration of RID's contractual groundwater pumping rights. As pointed out by ADWR, such a dispute would impair the department's ability to issue a determination of assured water supply for this water, greatly reducing the desirability of RID's water supply to any municipal providers, RID's prospective future customers.

Finally, legal questions exist regarding the extent to which RID is legally authorized to supply groundwater for non-irrigation uses. As the regulatory agency in charge of overseeing water use in Arizona, ADWR has questioned RID's legal ability to supply groundwater for non-irrigation uses.

ADWR's recognition that RID's proposal is barred by state law for a variety of reasons demonstrates the improbability and thus unreasonableness associated with RID's proposed sale of this pumped groundwater outside the West Van Buren area for drinking water purposes.

3. RID Lacks Infrastructure and Financing to Broker and Export Groundwater.

Lack of necessary infrastructure and financing makes RID's sale of this water for potable purposes unlikely. Some details regarding RID's thoughts on its future drinking water use are revealed in its Early Response Action (ERA) proposal documents. RID's proposed ERA involves numerous costly repairs, upgrades, and additions to RID's current infrastructure to facilitate RID's entry into the drinking water business. Miles of pipelines and upgrades and improvements to numerous wells are just some of the capital investments required before RID could become a drinking water purveyor. Additionally, as ADEQ is aware, RID has previously asserted that it plans to finance its future drinking water business from third parties through litigation and settlement proceeds. Lack of firm financial resources or even a sound plan to obtain funding for the many infrastructure and other expenses associated with this new business make it improbable.

The proposed potable uses by West Valley Cities would not occur if the groundwater was not impacted by the WQARF contamination. The cost to construct the

¹³ See A.R.S. § 45-494.

infrastructure needed to export the water would be prohibitive. Of course, RID cannot ask the WQARF program to fund a treatment and transportation system solely for the purpose of providing for a use that would otherwise be technically and financially impracticable.

RID claims that drinking water is a foreseeable end use of groundwater in the area. We agree. Drinking water is a foreseeable end use of groundwater in the West Van Buren Area for entities such as the City of Phoenix or Salt River Project and their customers. But use *by RID* of that groundwater for drinking water is not a foreseeable end use. RID is, and always has been, in the business of supplying irrigation water. As late as November 2007, RID reported that it only used groundwater for non-potable uses and that groundwater would continue to be used for those purposes in the future. ¹⁴ Specifically, RID indicated that it foresaw no significant changes in regard to its use of West Van Buren groundwater and that future uses (up to 100 years) for any impacted wells would be the "same as today." ¹⁵

RID now seeks to convert itself into a municipal water broker. It asserts that West Valley Cities will purchase this water for potable use. But in determining whether potable use by West Valley Cities outside the West Van Buren Site is reasonably foreseeable, ADEQ must ask whether RID's project would be feasible if the aquifer were not impacted. RID's proposal involves transportation of treated water to the West Valley at enormous expense. If the project to sell water for drinking water use is actually made feasible only by the WQARF remedy, then the use is not reasonably foreseeable.

4. RID's Speculative Future Uses Are Not Reflected in Municipal Water Documents.

An examination of the publicly available planning documents for Buckeye and Goodyear do not reveal a firm plan to rely upon RID for their future drinking water needs.

As discussed above, RID's system is not currently constructed in a manner that would allow it to begin delivering drinking water. Arizona's WQARF laws and regulations are clear – a WQARF remedy cannot be required to cover the costs that a well owner or water provider would have incurred regardless of the contamination. In other words, a party may not use the WQARF remedy process as a vehicle for improving its position. As explained in the agency's rulemaking package, WQARF remedy selection is intended to address:

only the impacts of a release or a threatened release of a hazardous substance ...[and] will not cover remedial action costs that would have been incurred if the release had not impacted the property or well. For

¹⁴ Stanley H. Ashby, Land and Waste Use Study Questionnaire, at 1-2 (November 12, 2007).

¹⁵ *Id.* at 4.

¹⁶ A.A.C. § R18-16-402(B).

example, a well may have high levels of trichloroethylene, arsenic, and total dissolved solids. If only the trichloroethylene was released and the other contaminants were present before the release, the well owner cannot require WQARF to clean up the remainder of the contaminants or replace the well with a more productive well. Likewise, a property owner who owns a landfill cannot require WQARF to remove or completely clean up a landfill so the property can be used for other uses. ¹⁷

RID's desire to convert its existing agricultural use to a drinking water use does not, by itself, establish that the use is reasonably foreseeable. Considering these additional factors – uncertain legal rights to water, inconsistency with Arizona law, ADWR's concerns, lack of infrastructure without adequate funding, and lack of customer commitments – leads to the conclusion that RID's future drinking water use is not reasonably probable and thus not reasonably foreseeable. For these reasons, RID's "drinking water use" should be deleted from the Draft Report.

C. The RID Canal Water Use and Associated ROs Are Duplicative and Should be Deleted from the Draft Report.

The purpose of ADEQ's discussion within Section 4.1 regarding RID Canal Water Use and the associated Remedial Objectives is unclear. First, the Remedial Objectives in Section 4.1 reference private wells and their contribution to RID's canals. Specifically, the first proposed RO is "[t]o protect, restore or otherwise provide a water supply for potable or non-potable use by currently impacted private well owners within the WVBA WQARF site..." It is unclear what ADEQ means with this reference to private wells. Of course all reasonably foreseeable uses must be listed as Remedial Objectives, without respect to whether the water is recovered from a private or public well. The Draft Report, however, already addresses uses associated with private groundwater wells within Section 3.3. The reference in Section 4.1 appears to be addressing the well itself. Wells, canals, and other physical infrastructure are not themselves beneficial uses. Wells are addressed separately in the remedy selection rules. Every final remedy must address "any well that either supplies water for ...irrigation or agricultural uses ...if the well would now or in the reasonably foreseeable future produce water that would not be fit for its current or reasonably foreseeable end use without treatment."18 But the well itself is not a Remedial Objective. This reference to private well owners within the WVBA WQARF site is duplicative and unnecessary and should be removed from Section 4.1.

Second, the RID Canal water use discussion and proposed ROs are inconsistent with ADEQ's information collection effort as reflected in the Land and Water Use Report. In its Surface Water Use section, the Land and Water Use Report discusses RID's water delivery through its canal system and subsequent use outside of the WVBA

¹⁷ 8 A.A.R at 1499 (emphasis added).

¹⁸ 8 A.A.R. at 1503.

land area for agricultural purposes. ¹⁹ Agricultural groundwater uses and their associated ROs, including RID's use, are already discussed in Section 3.2 of the Draft Report. And although, as reflected in the comments above, we disagree with the specific listing of "RID's future drinking water use," municipal groundwater uses and associated ROs are also discussed in Section 3.1. The Draft Report's discussion of RID's canals is duplicative of the groundwater discussion within section 3.0 and the associated ROs.

As reflected in the information collected by the agency during its RI process, RID's canals serve merely as transport mechanisms similar to water pipelines. There are no legally-permitted beneficial end uses that occur within RID's canals. Their sole purpose is to transport groundwater blended with reclaimed water to RID's agricultural end users. Because RID's canals are not considered "waters of the U.S.," RID's canals are not surface waters. There is no need to specifically address "canal use" within the Draft Report.

If the canal use section was intended to identify some risk associated with RID's canals, this is the wrong forum for such identification. Instead, risks are appropriately included within a Remedial Investigation report and considered in the Feasibility Study in developing a remedy.²¹ In fact the rules spell out that the Feasibility Study must include both a demonstration that the Remedial Objectives will be met – that the reasonably foreseeable end uses will be protected, replaced, or provided for – and a separate evaluation of risks associated with those current and reasonably foreseeable uses.²² All exposures associated with transportation of water to its point of use, including vapor inhalation, ingestion, and dermal contact, must be evaluated. The same is true of potential exposures associated with other media within the West Van Buren Site. Those exposures are not Remedial Objectives, themselves. And there is no basis for transforming just one exposure associated with one use into a Remedial Objective for the Site. We respectfully request that ADEQ delete Section 4.1 from the Draft Report.

D. The Land Use Remedial Objectives are in Improper Form.

Finally, we note that some revision of the land use Remedial Objectives in section 2.0 is necessary to bring them into proper form. The Draft Report currently provides:

Based upon review of public comments, ADEQ proposes the following ROs for land use in the WVBA area:

 Protect against possible exposure to hazardous substances in surface and subsurface soils that could occur during development of property based upon applicable zoning regulations.

¹⁹ Land and Water Use Report at 13.

²⁰ See A.A.C. § R18-11-101(41)(defining surface waters); see also A.A.C. Title 18, Ch. 11, Appendix B (List of Surface Waters and Designated Uses).

²¹ See A.A.C. § R18-16-406(F) (requiring the results of a risk evaluation to be included within a draft remedial investigation report).

²² A.A.C. § R18-16-407(H).

- Protect against possible leaching of hazardous substances in surface and subsurface soils to the groundwater.
- Protect against possible land restrictions required by applicable zoning regulations because of hazardous substances in surface and subsurface soils.

We suggest that the proper land use Remedial Objectives are:

- Protect against the loss or impairment of current uses of land as a result of releases of hazardous substances.
- Protect against the loss or impairment of reasonably foreseeable future uses of land (as provided in zoning regulations and planning documents of local land use authorities) as a result of releases of hazardous substances.

Section 2.0 of the Draft Report seems to set a goal of protecting against exposures during development of property, but ignores other exposures (such as any under current uses). As we have previously stated, we agree that all exposures must be evaluated and addressed in the remedy selection process. Evaluation of all exposure pathways is part of the Remedial Investigation and Feasibility Study process as outlined in the WQARF rules.²³

In summary, we support the Remedial Objectives as drafted within the report and suggest only three revisions: (1) delete the listed RID future drinking water supply use, (2) delete Section 4.1, "RID Canal Water Use", and (3) revise the proposed land use Remedial Objectives. We appreciate you considering our comments and look forward to your response.

Sincerely,
KirenScrokingford

Karen S. Gaylord for

Arizona Public Service Company
City of Phoenix
Components, Incorporated
Cooper Industries, LLC
Dolphin, Inc.
Holsum Bakery, Inc.
Honeywell International Inc.
Laundry & Cleaners Supply, Inc.
Maricopa Land and Cattle Company

Meritor, Inc.
Milum Textile Services Co.
Penn Racquet Sports
Prudential Overall Supply
Schuff Steel
Univar USA, Inc.

²³ *Id*.